

BOOK REVIEW

LESTER S. KING: *Medical Thinking: A Historical Preface*. Princeton, Princeton University Press, 1982. pp. ix + 336.

IN starting to read this instructive book it is important to take carefully into account both the title and the subtitle. Together they tell us that the author has undertaken to consider a variety of fundamental problems encountered in the course of medical activity, and that he has examined these problems with respect to their inherent or philosophical character and also in their historical dimension. Thus he has proposed to use the methods or tenets of philosophers and the insight that can be derived from historical analysis. To this combined exploration he brings a training in philosophy and Greco-Roman classics, plus decades of practise in pathology and neuropathology, plus long experience as medical historian, editor, and teacher. The book is a thoroughgoing success.

Since earliest recorded antiquity, as Dr. King points out in his prefatory chapters, physicians have tried to cope with a number of basic problems, such as the nature of the patient's sickness, the choice of treatment, the assignment of causes, and the establishment of preventive measures. The annals reveal a group of elements that are virtually constant. Yet recent essayists and newspaper writers, intent on describing impressively the triumphs of modern medicine, have misread the record: they have belittled the past and have made it appear unconnected with the present, somewhat like a newly-rich merchant who disclaims his obscure ancestors.

To exemplify such antihistorical attitudes, Dr. King presents a series of passages taken from *The Medusa and the Snail*, a book written by Dr. Lewis Thomas and published in 1979. Having read less than half of Dr. Thomas' engaging and widely disseminated volume, I am unwilling to comment on it, but the excerpts selected by Dr. King unquestionably evince an antihistorical or counterhistorical view that is common nowadays. The past is easy to ridicule but difficult to analyze.

When Dr. King states that "over the past twenty-five hundred years of medicine certain problems have persisted with remarkable constancy" he is careful to add that "the answers change; the problems, the questions, remain the same." Doubtless this statement was not intended to be taken as absolute and unqualified. As the late Dr. Richard Shryock pointed out, medicine has undergone occasional changes in scope; this is exemplified by alterations of

opinion with regard to such specialties as lithotomy, general surgery, and cosmetology. Perhaps these examples can be taken as instances in which the answers but not the questions have changed in the course of time.

Another kind of change is the accretion of factual knowledge accompanied by conceptual alteration. To illustrate the way in which this process has operated during the last 300 years, Dr. King uses the history of tuberculosis, the disease that used to be called "consumption." Disclaiming any intention to interpose a complete history of this malady, he presents an excellent abbreviated narrative that he has conveniently divided into five stages, beginning with such clinical observations as those of Morton and Cullen, and a period of clinicopathological correlation (Bayle, Laennec), followed in turn by eras of microscopy, bacteriology, and immunology. Many other examples could have been chosen, such as lupus erythematosus, or serous apoplexy, or nightmare, but tuberculosis commands the attention that we accord to large destructive forces. Of special interest in Dr. King's presentation is his analysis of Rudolf Virchow's great contributions and great errors.

The chapter titled Signs and Symptoms endeavors to clarify two terms that are in daily use but have lost part of their sharpness, like the coins of an old kingdom. The author remarks, reasonably enough, that "prior to the 19th century . . . in general there was not a great deal of difference between what the patient perceived and what the doctor perceived. The great difference between the physician and the patient lay in interpretation." He adds that "before the era of technological advances, any notion of subjective, as contrasted with objective, was quite pointless. The important contrast lay in the degree of understanding to which the observations might give rise." I am not convinced that this statement is necessarily correct. It is not hard to imagine that on some occasion Marcus Aurelius might have said he felt feverish but that Galen, his physician, found nothing wrong, or conversely, that the Emperor felt well but his argumentative medical advisor considered him feverish. In other words, the distinction between clinically subjective and clinically objective need not be discarded, especially since it proves useful in daily medical practice.

A few pages farther along, the author says: "The belief that a symptom is a subjective report of the patient, while a sign is something that the physician elicits, is a 20th century product that contravenes the usage of 2,000 years of medicine. In practice, now as always, the physician makes his judgments from the information that he gathers. The modern usage of signs and symptoms emphasizes merely the source of the information, which is not really too important. Far more important is the use that the information

serves.” Whatever the merits of this opinion, I object to the argument used in reaching it, because I think we are perfectly privileged to reject the usage of 2,000 years if we have reason to do so. Otherwise we shall be licensing the past to tyrannize over the present and the future.

In taking up the subject of diagnosis, the author makes the important point that nosologic categories undergo change in the course of time. He illustrates this correct assertion by showing how the word “scirrhus” was used by Boerhaave, van Swieten, Astruc, Virchow, and Delafield and Prudden. As the concepts evolved, the main considerations were the differentiation between inflammatory swellings and neoplasms and between benign masses and malignant. Despite historical vicissitudes, the term scirrhus carcinoma is still in use today.

From diagnosis the author proceeds to consider classification. Here he deals with a subject that has long been one of his favorites. Interesting features are: the influence of botanical taxonomy on medical; the overlapping, incomplete, disorderly (and hence logically defective) categories in John Parkinson’s *Theatrum Botanicum* (1676); the nosologic taxonomy of Thomas Sydenham; and the *Genera Morborum* of Carolus Linnaeus (1763), overshadowed by his earlier botanical classifications (1735, 1737).

In the discussion of Boissier de Sauvages, the eminent 18th century nosologist, attention is called to Sauvages’ practical purpose, which led him to classify diseases by constantly observable essential manifestations, the emphasis being placed on varieties rather than on causes. These 17th, 18th, and 19th century efforts are compared with the system employed in familiar recent textbooks of medicine, in which the arrangement of chapters is designed for maximum usefulness and not for compliance with the rules of logic. Even though we may wonder parenthetically whether the logic of computers will someday intrude itself into the design of the clinical textbook, the comparison between old and recent taxonomies illustrates anew the relative constancy of some basic medical problems and the changes in outlook.

Especially important parts of the volume under review are three chapters which discuss disease and three which discuss causes of disease. The first of these series describes the functional definition expressed by Sennert, the iatromechanical view adopted by Hoffmann, the functional emphasis of Boerhaave, and the changes produced by the development of laboratory medicine, which separated the physician from the basic scientist. (One recalls Trousseau’s remark that one of his colleagues, although a chemist, had not lost all common sense.) Dr. King distinguishes, usefully but a little

infelicitously, between trivial deviations to which he gives the hyphenated name *dis-ease* and the more serious conditions that receive no hyphen. He stresses the societal norm: "The grounds for calling a condition a disease rests, ultimately, on the values of society and not on statistical estimation."

In elaborating his concept of disease, the author distinguishes between recognition and what he calls *knowledge-about*, a term which he uses to represent an aggregate of information about a particular class of objects; this, it is alleged, constitutes its meaning. "Knowledge-about", if I have understood correctly, signifies information plus significance, or significance derived by summing information. I cannot avoid wondering whether the totality of information about a thing or a class of things is equal to their significance. Probably the answer depends on what is meant by totality of information.

Dr. King offers a tentative and approximate distinction between the clinical entity, "a recurrent pattern having to do with disease" and disease entity, which is "the clinical entity with a large accretion of knowledge-about." These distinctions are tested by a series of examples, such as phthisis, scrofula, malaria, food poisoning, heart block, and puerperal fever. An additional example is Bright's disease, chosen as a concept that was useful for a limited period and has now become obsolete (except in popular usage). By means of these and other nosologic test-objects it is demonstrated, clearly and well, that the definition of a disease entity "is an arbitrary process dependent on context, interest, and usefulness."

One of the most important parts of Dr. King's book is the relatively brief section on ontology, the science which deals with problems of being and of reality (pp. 175-83). After a rapid summary of the Aristotelian contribution, the realism of Plato, and the contrary opinion of the nominalists, who deny the reality of general terms, the author mentions the neogalenic emphasis on the existence of immaterial entities, and the decline of neogalenic influence with the advent of the iatromechanical school in the late 17th century. He adds: "The modern scientist can wholeheartedly subscribe to Platonic doctrine. . . . We can accept the concept that form (or pattern or relationship) are 'immaterial,' and that form and matter are inseparable. Yet in that combination we must distinguish patterns or relationships and assign them full reality . . . *patterns are an inseparable and primary part of whatever we call reality*" (italics in the original).

(Anyone who doubts the value of such discussions is urged to ask a group of medical students—or instructors—whether typhoid fever is real. Someone will usually reply that since thousands die of typhoid, it must be real. How

could they have died of something unreal? One answer is that during the Civil War large numbers of people died of “typhomalarial fever.” Nowadays this disease no longer exists.)

Rivalling or exceeding ontology in importance is the problem of cause. This section of the book, like the others, is concise and clear, but I wish Dr. King had not used the ambiguous term “natural philosophy” (p. 219). He favors the concept of networks of causes, a device that is both useful and advantageous, since it avoids fallacious attribution of single causes. Dr. King points out, *inter alia*, the view that the *totality* of causes constitutes the cause (a sort of “bottom-line” notion). He calls attention also to the confusion between remote and proximal causes. Readers should ponder his remark that “proximal cause is . . . different from any of the remote causes. It differs not only in temporal relationships but through its intrinsic logical nature.”

Dr. King’s valuable book offers the medical reader a concise and clear discussion of important problems that he must constantly encounter. Clarity is assisted by the judicious selection of topics and by a diversity of illustrative examples, most of which have been drawn from clinical medicine, laboratory medicine, and medical history. The author deserves the gratitude of every serious reader who wants to understand what medicine is all about.

In the autumn of 1981, during a medicohistorical seminar conducted at one of our excellent universities, it was pointed out that 16th and 17th century textbooks of medicine sometimes contained chapters on logic. Query: have we lost anything by ejecting logic and philosophy from the medical curriculum? The participants in the seminar expressed *no* desire to have these subjects restored to grace. I hope that each of these young naysayers will find a copy of Dr. King’s book and will read it attentively.

SAUL JARCHO, M.D.